

THAT WHICH IS CLAIMED IS:

1. A method of making a keratinase, comprising:

(a) culturing a recombinant *Bacillus* in a media, said recombinant *Bacillus* having at least one heterologous *kerA* coding segment inserted into the chromosome thereof, with said recombinant *Bacillus* producing greater quantities of keratinase than a corresponding wild-type *Bacillus* that does not have said at least one heterologous *kerA* coding segment inserted into the genome thereof; and then

(b) collecting said keratinase from said media.

2. The method of claim 1, wherein said media comprises not more than 3% protein substrate.

3. The method of claim 1, wherein said media comprises 1% soy and 1% feather meal.

4. The method of claim 1, wherein said *Bacillus* is selected from the group consisting of *Bacillus licheniformis* and *Bacillus subtilis*.

5. The method of claim 1, wherein said *Bacillus* is *Bacillus licheniformis*.

6. The method of claim 1, wherein said *kerA* coding segment is a *Bacillus licheniformis* or *Bacillus subtilis* *kerA* coding segment.

7. The method of claim 1, wherein said *kerA* coding segment is a *Bacillus licheniformis* *kerA* coding segment.

8. The method of claim 1, wherein said corresponding wild-type *Bacillus* is *Bacillus licheniformis* PWD-1.

9. The method of claim 1, said recombinant *Bacillus* having a plurality of said heterologous *kerA* coding segment inserted into the chromosome thereof.

10. The method of claim 1, said recombinant *Bacillus* having from 3 to 5 of said heterologous *kerA* coding segment inserted into the chromosome thereof.

11. The method of claim 1, wherein said recombinant *Bacillus* is a protease-deficient *Bacillus*.
12. The method of claim 1, wherein said *kerA* coding segment is operatively associated with a constitutive promoter.
13. The method of claim 1, wherein said *kerA* coding segment is operatively associated with a P43 promoter.
14. A recombinant *Bacillus* having at least one heterologous *kerA* coding segment inserted into the chromosome thereof, with said recombinant *Bacillus* producing greater quantitites of keratinase than a corresponding wild-type *Bacillus* that does not have said at least one heterologous *kerA* coding segment inserted into the genome thereof.
15. The recombinant *Bacillus* of claim 14, wherein said *Bacillus* is selected from the group consisting of *Bacillus licheniformis* and *Bacillus subtilis*.
16. The recombinant *Bacillus* of claim 14, wherein said *Bacillus* is *Bacillus licheniformis*.
17. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is a *Bacillus licheniformis* or *Bacillus subtilis* *kerA* coding segment.
18. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is a *Bacillus licheniformis* *kerA* coding segment.
19. The recombinant *Bacillus* of claim 14, wherein said corresponding wild-type *Bacillus* is *Bacillus licheniformis* PWD-1.
20. The recombinant *Bacillus* of claim 14 having a plurality of said heterologous *kerA* coding segment inserted into the chromosome thereof.

21. The recombinant *Bacillus* of claim 14 having from 3 to 5 of said heterologous *kerA* coding segment inserted into the chromosome thereof.
22. The recombinant *Bacillus* of claim 14, wherein said recombinant *Bacillus* is a protease-deficient *Bacillus*.
23. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is operatively associated with a constitutive promoter.
24. The recombinant *Bacillus* of claim 14, wherein said *kerA* coding segment is operatively associated with a P43 promoter.
25. A bacterial culture comprising a recombinant *Bacillus* of claim 14 in a culture media.
26. The bacterial culture of claim 25, wherein said culture media comprises not more than 3% protein substrate.
27. The bacterial culture of claim 25, wherein said culture media comprises 1% soy and 1% feather meal.
28. A method of making a recombinant *Bacillus* of claim 14, comprising the steps of:
 - (a) inserting a *kerA* coding segment into an integrative *Bacillus* expression vector, said *kerA* operatively associated with a promoter, said promoter operative in *Bacillus* bacteria; and then
 - (b) transforming a *Bacillus* with said integrative *Bacillus* expression vector.
29. The method of claim 28, wherein said integrative *Bacillus* expression vector includes alpha-amylase 5'- and 3'-flanking DNA segments, and wherein said *kerA* coding segment is inserted between said alpha amylase 5'- and 3'-flanking segments.
30. The method of claim 28, wherein said integrative *Bacillus* expression vector is pLAT10.